

This listing of claims will replace the version of claims appended to the accompanying specification.

Listing of the claims

Claims 1-33 (Cancelled).

Claim 34 (New) A method of manufacturing a vapor exchange system for use in building insulation, comprising attaching a film having a water vapor diffusion resistance (s_d -value) at a relative humidity of an atmosphere surrounding the vapor retarder in the region of 30% to 50% of 2 to 5 meters diffusion-equivalent air layer thickness, and, at a relative humidity in the region of 60% to 80% which is < 1 meter diffusion-equivalent air layer thickness to at least one carrier material selected from the group consisting of a fiber board suitable for use as a building insulation, a fiber insulation batt, fiber insulation slab, a particle board, a chip board, an orientated strand board, a plywood panel, a gypsum board, a fiber-reinforced gypsum board, a fiber board, a cement board, a cementitious wood wool board, a calcium silica board, a wall paper, and a cloth.

Claim 35 (New) The method of claim 34, wherein the film is sandwiched between at least two layers of the carrier material, the two layers of carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 36 (New) The method of claim 34, wherein the film component comprises polyamide.

Claim 37 (New) The method of claim 36, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 38 (New) The method of claim 37, wherein the polyamide is polyamide 6.

Claim 39 (New) The method of claim 34, wherein the film has a thickness of 10 μm to 2 mm.

Claim 40 (New) The method of claim 34, wherein the film has a thickness of 20 μm to 100 μm .

Claim 41 (New) The method of claim 34, wherein the attaching comprises spraying or painting the film onto the carrier.

Claim 42 (New) The method of claim 34, wherein the film is a formed film.

Claim 43 (New) The method of claim 42, wherein the film comprises polyamide.

Claim 44 (New) The method of claim 43, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 45 (New) The method of claim 44, wherein the polyamide is polyamide 3.

Claim 46 (New) The method of claim 42, wherein the thickness of the formed film is 10 μm to 2 mm.

Claim 47 (New) The method of claim 42, wherein the thickness of the formed film is 20 μm to 100 μm .

Claim 48 (New) The method of claim 42, wherein the formed film comprises a pattern.

Claim 49 (New) The method of claim 42, wherein the formed film comprises a printed color pattern.

Claim 50 (New) The method of claim 34, wherein the carrier is a fiber board suitable for use as a building insulation

Claim 51 (New) The method of claim 34, wherein the carrier is a fiber insulation batt.

Claim 52 (New) The method of claim 34, wherein the carrier is a fiber insulation slab.

Claim 53 (New) The method of claim 34, wherein the carrier is a particle board.

Claim 54 (New) The method of claim 34, wherein the carrier is a chip board.

Claim 55 (New) The method of claim 34, wherein the carrier is a orientated strand board.

Claim 56 (New) The method of claim 34, wherein the carrier is a plywood panel.

Claim 57 (New) The method of claim 34, wherein the carrier is a gypsum board.

Claim 58 (New) The method of claim 34, wherein the carrier is a fiber-reinforced gypsum board.

Claim 59 (New) The method of claim 34, wherein the carrier is a fiber board.

Claim 60 (New) The method of claim 34, wherein the carrier is a cement board.

Claim 61 (New) The method of claim 34, wherein the carrier is a cementitious wood wool board.

Claim 62 (New) The method of claim 34, wherein the carrier is a calcium silica board.

Claim 63 (New) The method of claim 34, wherein the carrier is a wall paper.

Claim 64 (New) The method of claim 34, wherein the carrier is a cloth.